User Manual
soft air® simplex wds

Art. No. 110 470-wds

Pressure ulcer prevention and treatment-system

Assembly and Operation instructions

pressure relief products

Health. Safety. Independence.

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Foreword

Dear client!

You are now holding the user manual of the **soft air® simplex wds** therapeutic support system of **ADL® GmbH**.
The **soft air® simplex-wds** system is a system for Pressure Ulcers prevention and treatment produced by **ADL®** Germany.
There is a choice of using the system in the static position or alternating pressure.
The **soft air® simplex-wds**, large cell system has been developed for pressure ulcer prevention and treatment up to Medium Risk (Stage 2; EPUAP).
With the writing of this user manual the product management of the **ADL® GmbH** has set itself the goal, to create a good and understandable aid and guidance for the employment of the system. If nevertheless questions remain, please ask your provider for direction and assistance.

Your
ADL® GmbH

1 Safety Instructions

The system may not be used in presence of open flames, heaters a.o's. Protect the equipment against humidity. Operate it only in dry areas. No combustible gases or liquids may enter into the system.

EXPLOSION DANGER!

Warning! Note! The compressor is under power, as soon as the power supply plug is put in. Before opening the housing of the compressor please unplug the power plug. Repairs must be performed only by qualified technical personnel.
The compressor may only be used for its purpose. In case of damage to the compressor the power supply plug must be unplugged immediately.
Damaged power supply cord should be replaced immediately.
Only room temperatures of 0 - 35 °C provide assurance to good compressor operation.

2 Product overview soft air® simplex wds

Quantity	Description	Art. No.
1	Base	110 475-FO
1	soft air® simplex wds, power unit	110 471-WDS-FO
1	soft air® simplex wds, spare cell	110 473-FO
1	soft air® simplex wds, spare cover	110 472-FO
1	Service Manual	999 190
1	User Manual soft air® simplex wds	113 003-FO-GB

3 Introduction

soft air® simplex wds is a cover mattress system, meaning there should be an additional mattress on the bed with a thickness of at least 5 cm.
This system is suitable for patients with a body weight of 40 to 120 kg.
Please note that these weight indications are applicable for patients in a lying position. Other positions will result in another distribution of weight.
The **soft air® simplex-wds** system is a dynamic three chamber pressure relief system (ABC-System) with a constant total cycle time of 10 minutes.

With the black switch at the middle of the front panel you can select alternating pressure or static pressure.

4 Explanation of indications and functions

1 On / off switch

2 Selection switch (alternating/static)

3 Pressure setting

5 System installation and setting up soft air® simplex wds

1. Place the **soft air® simplex wds** system on the present mattress and fix the straps to this mattress. For this purpose simply tuck the bottom parts underneath the head and foot of the mattress and place it back on the bottom of the bed.

2. Place the mattress in such a way that the tubing of the system is located at the foot of the bed.

3. Verify the **CPR (Cardio-Pulmonary Resuscitation)** function is closed. The CPR is designed to quickly deflate the mattress. For quickly deflating the mattress pull the yellow strap.

4. Hang the power unit at the foot end of the bed or put it under the bed. **Please note that the unit should not be covered in any way, as thermal damage can occur!**

5. Connect the tubes to the power unit by pushing the tube on the corresponding pipe of the power unit.

6. Check if the tubes are not bent or trapped between other parts.

7. Plug the power supply in.

8. Switch the unit on. (1)
It will take about 30 minutes to inflate the system. After that the patient can be placed on the mattress.

6 Static function

In case of a contra indication for alternating pressure according to the indications overview, the large cell mattress can be switched from alternating pressure to static pressure with the wds switch at the power unit.
Adjustment to maximum comfort in this mode can be achieved the same way as before.

As in static mode all cells are active, it is necessary to reduce the set pressure with about 10 – 15 mbar.

To switch over to static function, press the black switch in the middle of the front panel to "Static".
To switch over to alternating pressure press the switch at "Alternating".

Don't forget to increase the pressure when switching over to alternating pressure.

7 CPR function

Please ensure the **CPR** is always closed. The **CPR** strap is located at the top right site of the mattress. Push the strap as much as possible to the inside of the bed to avoid damaging the tubes e.g. when opening the bedrail.

8 Pressure setting

1. The most effective pressure level can be set manually by turning the knob at the front display of the power unit. 2
   Under the deepest point of the patient (normally under the hip) has to be a distance of 3 - 4 cm to the bottom of the overlay system. Check it with your hand. 3 - 4 cm are about 2 fingers wide. Open the cover and put your hand between a inflated and a deflated cell.
   When the patient sinks too far in the mattress the "Hammock-effect" occurs. This should be avoided at all times.
   Please take care that the lordosis area's are filled with supporting material to ensure the most effective surface contact area.
2. If there is too less pressure (only one finger), you have to turn the knob 2 clockwise.
3. If there is too much pressure (check if there is enough supporting material under the lordosis of the spine and the knees), you have to turn the button anti-clockwise.

9 Reinigungshinweise · Service

- During use the mattress and tubes should be cleaned weekly using a damp soft cloth and mild detergent or non-phenol germicidal solution.

Never use any detergents containing aldehyde!

- After changing to another patient the mattress should be disinfected by an accredited company approved by the **Robert-Koch-Institute**. Please ensure conformity to the European guideline for medical devices , directions for prepa ration of medicine products and directions for hospital hygiene and prevention of infections from the **Robert-Koch-Institute** or other guidelines they rule.
- The PU cover can be washed to a maximum temperature of **95 °C** and be re-used after a thermal process (e.g. Ottalin - Peracet - process).
  Also a steam sterilisation process can be applied.
  The power unit of the **soft air simplex®** wds system, should be cleaned with a damp cloth and soap detergent or a mild non-aldehyde cleaning detergent.
- Disinfection with cleaning on locations is also possible, when instructions for use and process time are properly kept.
- **ADL® GmbH** prescribes safety-related **revisals** of all electric powered parts after at least 2 years.
  The rules for accident prevention BGV A2 will remain unaffected.
  The **revisals** may only be conducted by especially trained personal.

Disinfectant recommendations:
BACILLOCID RASANT (BODE), BACILLOL AF (BODE), BACILLOCID SPEZIAL (BODE), KOHRSOLIN FF (BODE), KOHRSOLIN (BODE), MICROBAC FORTE (BODE), DISMOZON PUR (BODE), INCIDIN FOAM (ECOLAB), INDUR DES (ECOLAB).

Check with your supplier that the disinfectant does not damage plastic surfaces (PUR, PA, ABS, PVC).
Prevent contact on electrical components with damp or moisture.
Cleaning cloths should be damp, not wet.
Carefully check no **moisture** remains in the system.
Execute a **functions control** procedure before using the system again.
Check your cleaning process on **effectiveness** on a regular basis.

10 Troubleshooting

Problem	Cause	Solution
Mattress does not inflate or inflates insufficiently.	Connectors are not accurately locked. Tubes are twisted or kinked. Defect cell.	Check connection and position of the tubes. Exchange possible defect cells.
The unit does not operate (green light at on switch is not illuminated).	No power available. Plug defect, power cord socket defect, safety fuse defect.	Check plug and partition. Check the safety fuse at the location where the power cord enters the power unit.
The patient sinks too deep into the mattress.	Air cell defect. Tubing defect.	Check pressure setting. Pressure not correctly set.

11 Indications & counter indications

	Indications	Counter-indications
Alternating Pressure soft air® simplex wds	Pressure ulcers up to Medium Risk (Stage 2, EPUAP). Large surface wounds. Plastic surgery.	Spastics e.g. situation according to Apoplex. Pain patients, e.g. patients with osteoporosis. Neurological patients (e.g. lost of sensivity). Instable fractures.
Static Pressure soft air® simplex wds	Pressure ulcers up to Medium Risk (Stage 2, EPUAP). Large surface wounds. Spastics e.g. situation according to apoplex. Pain patients e.g. patients with osteoporosis.	Spastics e.g. situation according to Apoplex. Pain patients, e.g. patients with osteoporosis. Neurological patients (e.g. lost of sensivity). Instable fractures.

12 Technical data

	soft air® simplex wds	Cover
Material	Polyvinyl chloride (Mattress)	Polyurethane
Dimensions in cm	196 x 88 x 12,5 (Mattress) 30 x 12 x 10 (Power unit)	196 x 88 x 22,5
Weight in kg	ca. 4,5 (Mattress) ca. 1,5 (Power unit)	ca. 0,9
Warranty*	2 years	--
Electr. connections	230 V / 50 Hz / 7 W (Power unit)	--
Cleaning	Thermal disinfection (Mattress)	95 °C washable
Application	Pressure ulcer prevention and treatment up to Medium Risk therapy support (Stage 2; EPUAP), with patient weights between 40 kg – 130 kg	Incontinent mattress protection

* Warranty only valid in case of production or material failures.

In case of technical problems please contact your appointed dealer or direct the ADL® GmbH.

(Dealer stamp)

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